

Claims

Claims 1-43 (canceled).

44. (previously presented) A method for determining the presence or concentration of an analyte in a medium, said method comprising:

providing a reaction mixture comprising in combination:

a medium suspected of containing an analyte;

a first specific binding pair member bound to a water-insoluble solid support;

a second specific binding pair member bound to a sensitizer, said sensitizer capable in its excited state of generating a reactive oxygen species, wherein the proximity of the first specific binding pair member with the second specific binding pair member is modulated by the presence of the analyte; and

digoxigenin-linked biotin linked to the solid support through a reactive oxygen cleavable linker;

incubating the reaction mixture;

exciting the sensitizer, said excitation of the sensitizer causing the formation of reactive oxygen, which cleaves the cleavable linker and releases digoxigenin-linked biotin from the solid support; and

detecting the released digoxigenin-linked biotin, the amount thereof being related to the amount of analyte in said medium.

45. (previously presented) The method of claim 44 wherein:

the proximity of the first and second specific binding pair members to one another results from the binding of the first and second specific binding pair members to the analyte;

the sensitizer is a photosensitizer;

the reactive oxygen species is singlet oxygen; and

the excitation step comprises irradiation of the photosensitizer with light.

46. (previously presented) The method of claim 44 wherein:

the step of detecting the released digoxigenin-linked biotin is carried out by a detection method employing, as a third specific binding pair member, avidin bound to a member of a signal producing system or anti-digoxigenin antibodies bound to a member of a signal producing system or both.